



Rebecca J. Dulin  
Senior Counsel

Duke Energy  
1201 Main Street  
Capital Center Building  
Suite 1180  
Columbia, SC 29201

o: 803.988.7130  
f: 803.988.7123  
Rebecca.Dulin@duke-energy.com

February 27, 2018

**VIA ELECTRONIC FILING**

The Honorable Jocelyn G. Boyd  
Chief Clerk/Administrator  
Public Service Commission of South Carolina  
101 Executive Center Drive, Suite 100  
Columbia, South Carolina 29210

Re: **Duke Energy Progress, LLC – Monthly Power Plant Performance  
Report  
Docket No. 2006-224-E**

Dear Ms. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is the Monthly Power Plant Performance Report in Docket No. 2006-224-E for the month of January 2018.

Should you have any questions regarding this matter, please do not hesitate to contact me at 803.988.7130.

Sincerely,

Rebecca J. Dulin

Enclosure

cc: Ms. Dawn Hipp, Office of Regulatory Staff  
Mr. Jeffrey M. Nelson, Office of Regulatory Staff  
Ms. Shannon Bowyer Hudson, Office of Regulatory Staff  
Ms. Nanette Edwards, Office of Regulatory Staff  
Michael Seaman-Huynh, Office of Regulatory Staff  
Ms. Heather Shirley Smith, Duke Energy  
Mr. Scott Elliott, Elliott & Elliott, P.A.  
Mr. Garrett Stone, Brickfield, Burchette, Ritts & Stone, PC  
Mr. Gary Walsh, Walsh Consulting, LLC

**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

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Period: January, 2018

Station	Unit	Date of Outage	Duration of Outage	Scheduled / Unscheduled	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
Brunswick	1	None					
	2	None					
Harris	1	01/14/2018 - 01/18/2018	104.82	Unscheduled	Feedwater chemistry out of tolerance	The cause of the chemistry excursion that led to reactor shutdown was valve seat leakage in the condensate demineralizer system	Four condensate demineralizer system valves were inspected during the outage as part of the cause investigation. One valve had evidence of leakage, while some degradation of the internal linings was evident in the others and all four valves were replaced
Robinson	2	None					

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
January 2018**

**Lee Energy Complex**

<b>Unit</b>	<b>Duration of Outage</b>	<b>Type of Outage</b>	<b>Cause of Outage</b>		<b>Reason Outage Occurred</b>	<b>Remedial Action Taken</b>
1B	1/7/2018 10:32:00 AM To 1/7/2018 11:22:00 PM	Unsch	5049	Other Gas Turbine Fuel System Problems	CT trip due to Gas Manifold Purge Pressure High	

**Richmond County Station**

No Outages at Baseload Units During the Month.

**Sutton Energy Complex**

<b>Unit</b>	<b>Duration of Outage</b>	<b>Type of Outage</b>	<b>Cause of Outage</b>		<b>Reason Outage Occurred</b>	<b>Remedial Action Taken</b>
1A	1/8/2018 2:21:00 PM To 1/17/2018 11:09:00 AM	Sch	3620	Main Transformer	Performing inspection on GSU transformer	
1B	1/2/2018 5:19:00 PM To 1/2/2018 6:16:00 PM	Unsch	0530	Other Main Steam System Problems	01B CT tripped to high HP bypass temperature	
ST1	1/2/2018 5:35:00 AM To 1/2/2018 8:09:00 PM	Unsch	1760	Feedwater Instrumentation (not Local Controls)	HP feedwater flow transmitters froze causing high drum level trip	

**Notes:**

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- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

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**January 2018  
Brunswick Nuclear Station**

	<u>Unit 1</u>	<u>Unit 2</u>		
<b>(A) MDC (mW)</b>	<b>938</b>	<b>932</b>		
<b>(B) Period Hours</b>	<b>744</b>	<b>744</b>		
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>681,433</b>	<b>97.64</b>	<b>665,441</b>	<b>95.97</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>14,733</b>	<b>2.11</b>	<b>0</b>	<b>0.00</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>1,706</b>	<b>0.25</b>	<b>27,967</b>	<b>4.03</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>697,872</b>	<b>100.00%</b>	<b>693,408</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>99.07</b>		<b>95.33</b>
<b>(L) Output Factor (%)</b>		<b>97.64</b>		<b>95.97</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,342</b>		<b>10,623</b>

\* Estimate  
FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

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**January 2018  
Harris Nuclear Station**

Unit 1

<b>(A) MDC (mW)</b>	<b>932</b>	
<b>(B) Period Hours</b>	<b>744</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>593,388</b>	<b>85.58</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>0</b>	<b>0.00</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>97,689</b>	<b>14.09</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>2,331</b>	<b>0.33</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>693,408</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>83.32</b>
<b>(L) Output Factor (%)</b>		<b>99.61</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,892</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

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**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

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**January 2018  
Robinson Nuclear Station**

Unit 2

<b>(A) MDC (mW)</b>	<b>741</b>	
<b>(B) Period Hours</b>	<b>744</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>595,109</b>	<b>107.95</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>0</b>	<b>0.00</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-43,805</b>	<b>-7.95</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>551,304</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>100.00</b>
<b>(L) Output Factor (%)</b>		<b>107.95</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>9,963</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

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**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
January 2018**

**Lee Energy Complex**

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	225	227	228	379	1,059
(B) Period Hrs	744	744	744	744	744
(C) Net Generation (mWh)	143,265	140,070	144,262	256,893	684,490
(D) Capacity Factor (%)	85.58	82.94	85.04	91.10	86.88
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	0	2,913	0	0	2,913
(J) Forced Outages: percent of Period Hrs	0.00	1.72	0.00	0.00	0.37
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	1,692	1,692
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.60	0.21
(M) Net mWh Not Generated due to Economic Dispatch	24,135	25,905	25,370	23,391	98,801
(N) Economic Dispatch: percent of Period Hrs	14.42	15.34	14.96	8.30	12.54
(O) Net mWh Possible in Period	167,400	168,888	169,632	281,976	787,896
(P) Equivalent Availability (%)	100.00	98.28	100.00	99.40	99.42
(Q) Output Factor (%)	85.58	84.39	85.04	91.10	87.20
(R) Heat Rate (BTU/NkWh)	9,220	9,258	9,169	3,606	7,110

Notes:

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
January 2018**

**Richmond County Station**

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	189	189	175	553
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	122,342	122,368	130,807	375,517
(D) Capacity Factor (%)	87.00	87.02	100.47	91.27
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	18,274	18,248	0	36,522
(N) Economic Dispatch: percent of Period Hrs	13.00	12.98	0.00	8.88
(O) Net mWh Possible in Period	140,616	140,616	130,200	411,432
(P) Equivalent Availability (%)	100.00	100.00	100.00	100.00
(Q) Output Factor (%)	87.00	87.02	100.47	91.27
(R) Heat Rate (BTU/NkWh)	10,965	10,895	0	7,123

Notes:

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**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
January 2018**

**Richmond County Station**

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	216	216	248	680
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	146,841	145,728	179,474	472,043
(D) Capacity Factor (%)	91.37	90.68	97.27	93.30
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	187	0	0	187
(J) Forced Outages: percent of Period Hrs	0.12	0.00	0.00	0.04
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	101	101
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.05	0.02
(M) Net mWh Not Generated due to Economic Dispatch	13,676	14,976	4,937	33,588
(N) Economic Dispatch: percent of Period Hrs	8.51	9.32	2.68	6.64
(O) Net mWh Possible in Period	160,704	160,704	184,512	505,920
(P) Equivalent Availability (%)	99.88	100.00	99.95	99.94
(Q) Output Factor (%)	91.48	90.68	97.27	93.34
(R) Heat Rate (BTU/NkWh)	11,047	11,127	0	6,872

Notes:

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- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
January 2018**

**Sutton Energy Complex**

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	224	224	271	719
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	99,788	142,362	134,389	376,539
(D) Capacity Factor (%)	59.88	85.42	66.65	70.39
(E) Net mWh Not Generated due to Full Scheduled Outages	47,667	0	0	47,667
(F) Scheduled Outages: percent of Period Hrs	28.60	0.00	0.00	8.91
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	28,927	28,927
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	14.35	5.41
(I) Net mWh Not Generated due to Full Forced Outages	0	213	3,948	4,160
(J) Forced Outages: percent of Period Hrs	0.00	0.13	1.96	0.78
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	4,137	4,137
(L) Forced Derates: percent of Period Hrs	0.00	0.00	2.05	0.77
(M) Net mWh Not Generated due to Economic Dispatch	19,201	24,081	30,223	73,505
(N) Economic Dispatch: percent of Period Hrs	11.52	14.45	14.99	13.74
(O) Net mWh Possible in Period	166,656	166,656	201,624	534,936
(P) Equivalent Availability (%)	71.40	99.87	81.64	84.13
(Q) Output Factor (%)	84.16	85.67	67.98	78.05
(R) Heat Rate (BTU/NkWh)	11,223	11,126	0	7,181

Notes:

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- (R) Includes Light Off BTU's

**Duke Energy Progress  
Intermediate Power Plant Performance  
Review Plan  
January 2018**

**Mayo Station**

**Unit 1**

(A)	<b>MDC (mW)</b>	746
(B)	<b>Period Hrs</b>	744
(C)	<b>Net Generation (mWh)</b>	292,749
(D)	<b>Net mWh Possible in Period</b>	555,024
(E)	<b>Equivalent Availability (%)</b>	99.71
(F)	<b>Output Factor (%)</b>	75.54
(G)	<b>Capacity Factor (%)</b>	52.75

**Notes:**

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**Duke Energy Progress  
Intermediate Power Plant Performance  
Review Plan  
January 2018**

	<b>Roxboro Station</b>		
	<b>Unit 2</b>	<b>Unit 3</b>	<b>Unit 4</b>
<b>(A) MDC (mW)</b>	673	698	711
<b>(B) Period Hrs</b>	744	744	744
<b>(C) Net Generation (mWh)</b>	254,416	292,353	268,448
<b>(D) Net mWh Possible in Period</b>	500,712	519,312	528,984
<b>(E) Equivalent Availability (%)</b>	96.44	80.23	77.35
<b>(F) Output Factor (%)</b>	76.02	71.95	77.11
<b>(G) Capacity Factor (%)</b>	50.81	56.30	50.75

**Notes:**

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- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress**  
**Base Load Power Plant Performance Review Plan**

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**February 2017 - January 2018**  
**Brunswick Nuclear Station**

	<u>Unit 1</u>	<u>Unit 2</u>		
<b>(A) MDC (mW)</b>	<b>938</b>	<b>932</b>		
<b>(B) Period Hours</b>	<b>8760</b>	<b>8760</b>		
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>8,141,367</b>	<b>99.08</b>	<b>7,184,032</b>	<b>87.99</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>70,647</b>	<b>0.86</b>	<b>691,653</b>	<b>8.47</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>78,598</b>	<b>0.96</b>	<b>185,182</b>	<b>2.27</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-73,732</b>	<b>-0.90</b>	<b>103,453</b>	<b>1.27</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>8,216,880</b>	<b>100.00%</b>	<b>8,164,320</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>98.06</b>		<b>90.13</b>
<b>(L) Output Factor (%)</b>		<b>99.94</b>		<b>96.14</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,421</b>		<b>10,815</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

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**February 2017 - January 2018  
Harris Nuclear Station**

**Unit 1**

<b>(A) MDC (mW)</b>	<b>932</b>	
<b>(B) Period Hours</b>	<b>8760</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>8,080,915</b>	<b>99.37</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>98,814</b>	<b>1.22</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>146,239</b>	<b>1.80</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-193,712</b>	<b>-2.39</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>8,132,256</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>96.69</b>
<b>(L) Output Factor (%)</b>		<b>101.18</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,570</b>

\* Estimate  
FOOTNOTE: D and F Include Ramping Losses

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**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

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**February 2017 - January 2018  
Robinson Nuclear Station**

**Unit 2**

<b>(A) MDC (mW)</b>	<b>741</b>	
<b>(B) Period Hours</b>	<b>8760</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>5,929,812</b>	<b>91.35</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>746,940</b>	<b>11.51</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>314</b>	<b>0.00</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-185,906</b>	<b>-2.86</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>6,491,160</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>88.10</b>
<b>(L) Output Factor (%)</b>		<b>103.23</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,352</b>

\* Estimate  
FOOTNOTE: D and F Include Ramping Losses

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**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
February, 2017 through January, 2018**

**Lee Energy Complex**

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	223	222	223	379	1,048
(B) Period Hrs	8,760	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,496,724	1,474,242	1,505,056	2,887,735	7,363,757
(D) Capacity Factor (%)	76.56	75.66	76.90	86.98	80.21
(E) Net mWh Not Generated due to Full Scheduled Outages	68,755	65,897	78,979	2,495	216,126
(F) Scheduled Outages: percent of Period Hrs	3.52	3.38	4.04	0.08	2.35
(G) Net mWh Not Generated due to Partial Scheduled Outages	264,098	255,117	257,351	139,721	916,288
(H) Scheduled Derates: percent of Period Hrs	13.51	13.09	13.15	4.21	9.98
(I) Net mWh Not Generated due to Full Forced Outages	5,887	2,913	3,219	48,417	60,436
(J) Forced Outages: percent of Period Hrs	0.30	0.15	0.16	1.46	0.66
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	8,776	8,776
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.26	0.10
(M) Net mWh Not Generated due to Economic Dispatch	119,504	150,271	112,595	232,895	615,265
(N) Economic Dispatch: percent of Period Hrs	6.11	7.71	5.75	7.01	6.70
(O) Net mWh Possible in Period	1,954,968	1,948,440	1,957,200	3,320,040	9,180,648
(P) Equivalent Availability (%)	82.66	83.35	82.62	93.99	86.91
(Q) Output Factor (%)	79.71	80.33	80.54	88.33	83.20
(R) Heat Rate (BTU/NkWh)	9,113	9,144	9,061	4,307	7,224

Notes:

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**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
February, 2017 through January, 2018**

**Richmond County Station**

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	189	189	175	553
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,238,295	1,216,788	1,401,249	3,856,332
(D) Capacity Factor (%)	74.79	73.49	91.41	79.61
(E) Net mWh Not Generated due to Full Scheduled Outages	128,243	134,092	121,818	384,153
(F) Scheduled Outages: percent of Period Hrs	7.75	8.10	7.95	7.93
(G) Net mWh Not Generated due to Partial Scheduled Outages	167,848	170,417	30,001	368,267
(H) Scheduled Derates: percent of Period Hrs	10.14	10.29	1.96	7.60
(I) Net mWh Not Generated due to Full Forced Outages	403	10,338	747	11,488
(J) Forced Outages: percent of Period Hrs	0.02	0.62	0.05	0.24
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	4,456	4,456
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.29	0.09
(M) Net mWh Not Generated due to Economic Dispatch	120,851	124,005	0	219,584
(N) Economic Dispatch: percent of Period Hrs	7.30	7.49	0.00	4.53
(O) Net mWh Possible in Period	1,655,640	1,655,640	1,533,000	4,844,280
(P) Equivalent Availability (%)	82.09	80.98	89.76	84.14
(Q) Output Factor (%)	81.18	80.65	99.35	86.76
(R) Heat Rate (BTU/NkWh)	11,482	11,285	0	7,248

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**Richmond County Station**

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	214	214	248	676
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,424,448	1,448,792	1,924,448	4,797,688
(D) Capacity Factor (%)	75.92	77.22	88.58	80.98
(E) Net mWh Not Generated due to Full Scheduled Outages	155,910	144,746	169,508	470,164
(F) Scheduled Outages: percent of Period Hrs	8.31	7.72	7.80	7.94
(G) Net mWh Not Generated due to Partial Scheduled Outages	188,071	186,008	9,247	383,326
(H) Scheduled Derates: percent of Period Hrs	10.02	9.91	0.43	6.47
(I) Net mWh Not Generated due to Full Forced Outages	17,999	3,667	446	22,112
(J) Forced Outages: percent of Period Hrs	0.96	0.20	0.02	0.37
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	879	879
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.04	0.01
(M) Net mWh Not Generated due to Economic Dispatch	89,700	92,916	67,952	250,568
(N) Economic Dispatch: percent of Period Hrs	4.78	4.95	3.13	4.23
(O) Net mWh Possible in Period	1,876,128	1,876,128	2,172,480	5,924,736
(P) Equivalent Availability (%)	80.69	82.16	91.71	85.21
(Q) Output Factor (%)	83.91	83.88	96.10	88.40
(R) Heat Rate (BTU/NkWh)	11,441	11,374	0	6,831

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**Duke Energy Progress  
Base Load Power Plant  
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**Sutton Energy Complex**

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	225	225	267	717
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,400,265	1,443,160	1,711,417	4,554,842
(D) Capacity Factor (%)	71.07	73.25	73.08	72.50
(E) Net mWh Not Generated due to Full Scheduled Outages	110,596	66,514	114,356	291,466
(F) Scheduled Outages: percent of Period Hrs	5.61	3.38	4.88	4.64
(G) Net mWh Not Generated due to Partial Scheduled Outages	263,677	260,435	59,446	583,558
(H) Scheduled Derates: percent of Period Hrs	13.38	13.22	2.54	9.29
(I) Net mWh Not Generated due to Full Forced Outages	26,299	33,937	4,922	65,157
(J) Forced Outages: percent of Period Hrs	1.33	1.72	0.21	1.04
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	19,511	19,511
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.83	0.31
(M) Net mWh Not Generated due to Economic Dispatch	169,419	166,211	432,243	767,873
(N) Economic Dispatch: percent of Period Hrs	8.60	8.44	18.46	12.22
(O) Net mWh Possible in Period	1,970,256	1,970,256	2,341,896	6,282,408
(P) Equivalent Availability (%)	79.67	81.69	91.55	84.72
(Q) Output Factor (%)	78.16	78.60	77.22	77.94
(R) Heat Rate (BTU/NkWh)	11,388	11,304	0	7,083

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**Duke Energy Progress  
Intermediate Power Plant  
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**Mayo Station**

<b>Units</b>	<b>Unit 1</b>
(A) MDC (mW)	746
(B) Period Hrs	8,760
(C) Net Generation (mWh)	1,594,299
(D) Net mWh Possible in Period	6,534,960
(E) Equivalent Availability (%)	86.09
(F) Output Factor (%)	50.98
(G) Capacity Factor (%)	24.40

**Notes:**

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**Duke Energy Progress  
Intermediate Power Plant  
Performance Review Plan  
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**Roxboro Station**

<b>Units</b>	<b>Unit 2</b>	<b>Unit 3</b>	<b>Unit 4</b>
<b>(A) MDC (mW)</b>	673	698	711
<b>(B) Period Hrs</b>	8,760	8,760	8,760
<b>(C) Net Generation (mWh)</b>	1,816,832	2,303,212	1,458,166
<b>(D) Net mWh Possible in Period</b>	5,895,480	6,114,480	6,228,360
<b>(E) Equivalent Availability (%)</b>	90.11	86.47	58.36
<b>(F) Output Factor (%)</b>	63.35	57.82	63.52
<b>(G) Capacity Factor (%)</b>	30.82	37.67	23.41

**Notes:**

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**Duke Energy Progress**  
**Outages for 100 mW or Larger Units**  
**January, 2018**

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<u>Unit Name</u>	<u>Capacity Rating (mW)</u>	<u>Full Outage Hours</u>		<u>Total</u>
		<u>Scheduled</u>	<u>Unscheduled</u>	
Brunswick 1	938	0.00	0.00	0.00
Brunswick 2	932	0.00	0.00	0.00
Harris 1	932	0.00	104.82	104.82
Robinson 2	741	0.00	0.00	0.00

**Duke Energy Progress**  
**Outages for 100 mW or Larger Units**  
**January 2018**

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Asheville Steam 1	192	0.00	0.00	0.00
Asheville Steam 2	192	0.00	5.40	5.40
Asheville CT 3	185	18.83	3.48	22.32
Asheville CT 4	185	0.00	6.28	6.28
Darlington CT 12	133	0.00	2.22	2.22
Darlington CT 13	133	0.00	4.12	4.12
Lee Energy Complex CC 1A	225	0.00	0.00	0.00
Lee Energy Complex CC 1B	227	0.00	12.83	12.83
Lee Energy Complex CC 1C	228	0.00	0.00	0.00
Lee Energy Complex CC ST1	379	0.00	0.00	0.00
Mayo Steam 1	746	0.00	0.00	0.00
Richmond County CC 1	189	0.00	4.52	4.52
Richmond County CC 2	187	0.00	11.55	11.55
Richmond County CC 3	185	0.00	4.98	4.98
Richmond County CC 4	186	485.55	1.13	486.68
Richmond County CC 6	187	0.00	2.97	2.97
Richmond County CC 7	189	0.00	0.00	0.00
Richmond County CC 8	189	0.00	0.00	0.00
Richmond County CC ST4	175	0.00	0.00	0.00
Richmond County CC 9	216	0.00	0.87	0.87
Richmond County CC 10	216	0.00	0.00	0.00
Richmond County CC ST5	248	0.00	0.00	0.00

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**Duke Energy Progress  
Outages for 100 mW or Larger Units  
January 2018**

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Roxboro Steam 1	380	0.00	0.00	0.00
Roxboro Steam 2	673	0.00	25.33	25.33
Roxboro Steam 3	698	131.18	0.00	131.18
Roxboro Steam 4	711	25.33	133.10	158.43
Sutton Energy Complex CC 1A	224	212.80	0.00	212.80
Sutton Energy Complex CC 1B	224	0.00	0.95	0.95
Sutton Energy Complex CC ST1	271	0.00	14.57	14.57
Wayne County CT 10	192	53.00	0.00	53.00
Wayne County CT 11	192	31.00	0.00	31.00
Wayne County CT 12	193	0.00	0.00	0.00
Wayne County CT 13	191	0.00	0.00	0.00
Wayne County CT 14	195	0.00	0.00	0.00

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